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10/780,833	02/18/2004	Steven F. Knittel	KNITTEL, ET AL. (LCNT/126	3728

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EXAMINER	
BELANI, KISHIN G	

ART UNIT	PAPER NUMBER
2443	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,833	KNITTEL ET AL.	
	Examiner	Art Unit	
	KISHIN G. BELANI	2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-4,6,9-19,28 and 29* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4,6,9-19,28 and 29* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to Applicants' amendment filed on 09/21/2011. **None of the claims 1-4, 6, 9-19, 28 and 29 have been amended. Claims 1-4, 6, 9-19, 28 and 29 are now pending** in the present application. The examiner's response to applicants' arguments is listed in the section "Response to Arguments" at the end of this office action. **This Action is made FINAL.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness
   or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 6, 9-16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morlitz (US Patent Application Publication # 2002/0065800 A1**) in view of **Pepper et al. (US Patent Publication # 7,206,777 B2)** and further in view of **Hall, III et al. (US Patent Publication # 7,870,089 B1).**

Consider **claim 1**, Morlitz shows and discloses an apparatus for use in a communication network (Fig. 1, client computers 10, with communication links 14 to the Internet 16, which in turn is linked to proxy servers 28 by links 32, to web servers 22 by links 30, and to storage media 34 by links 36, thereby forming a communication network apparatus; paragraphs 0018-0020 disclose the same details), comprising:
a *processor and a memory* (each of the client computer 10, proxy server 28 and web server 22 inherently includes a processor and a memory to operate); *the processor configured to:*

receive a request for a resource having embedded data (Abstract that discloses a client computer 10 which makes a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page, and the web server 22 receives the request via proxy server 28);
obtain the resource and the embedded data, bundle the resource and the embedded data into a response file, and send the file (Abstract that further discloses that the web server collects all the resources associated with the requested web page and bundles them into a single archive file, which is sent to the requesting client as a response; Fig. 1 that shows a proxy server 28 directing client's web page request to the web server 22; Fig. 2 which shows that the requested parent web page 52 has embedded child web pages 54, 56 and 58, that have embedded resources 66, 68, 70 (for parent) and 72, 74, 76, 78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 disclose the same details; Fig. 3 that shows the contents of a bundled and compressed archive file 102, assembled by the web server 22 and sent to the requesting client as a response; as well as a client request 100 that shows the URL of the web page being requested; paragraphs 0024-0028 and 0034 describe the same details).

However, Morlitz does not specifically disclose using a resource index file having information regarding the resource and the embedded data, wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data.

In the same field of endeavor, Pepper et al. show and disclose using a resource index file having information regarding the resource and the embedded data (Fig. 1 that shows Index 155 being built by XML indexer 150, the resource index file including information not only about the requested resource but also embedded data such as IBM logo 170, image 175 and style sheet 165; column 2, XML Example 1, lines 34-46; Fig. 2, column 6, Example 2, lines 31-67 and column 7, lines 1-7 describe the generation and use of the resource index file in specific details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a resource index file having information regarding the resource and the embedded data, as taught by Pepper et al., in the apparatus of Morlitz, so as to render the requested resource and all the embedded data within it to the web client for complete web page display.

However, Morlitz, as modified by Pepper et al., does not explicitly disclose an apparatus wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data.

In the same field of endeavor, Hall, III et al. show and disclose the claimed apparatus wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data (Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message

[e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources; flowchart of Fig. 3, which describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include, in the resource index file, a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data, as taught by Hall, III et al., in the apparatus of Morlitz, as modified by Pepper et al., so as to facilitate storage and retrieval of the resources embedded within a requested web page.

Consider **claim 2** and **as it applies to claim 1 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the request comprises a uniform resource identifier (in Morlitz reference, Fig. 3, Client request 100 which shows that the client request specifies a URL of a home web page; paragraph 0028, lines 4-9 disclose the same details).

Consider **claim 6** and **as it applies to claim 1 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the

processor is configured to update the request index file based on obtaining of the embedded data (in Morlitz reference, paragraph 0028, lines 4-25 which disclose that the embedded files are extracted to the depth specified in the client's request, thereby indicating updates to the request index file based on obtaining of the embedded data extracted to the level of the specified depth only; and
in Hall, III et al. reference, Fig. 3, steps 320-335 that show and column 8, lines 52-62 that disclose the same details).

Consider **claim 9** and **as it applies to claim 1 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein, for obtaining the embedded data, the processor is configured to:
send a plurality of uniform resource location requests for the embedded data using the links of the resource index file; and receive the embedded data (in Morlitz reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and in Hall, III et al. reference, Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message [e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be

sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources).

Consider **claim 10** and **as it applies to claim 9 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the processor is configured to send the uniform resource location requests for the embedded data using the links of the resource index file based on the order of pre-determined times to obtain the embedded data (in Morlitz reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and in Hall, III et al. reference, flowchart of Fig. 3, which describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources).

Consider **claim 11** and **as it applies to claim 1 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the processor is configured to perform at least one of data acceleration, compression, trans-

coding, and application-based optimization on the resource and the embedded data (in Morlitz reference, abstract that discloses compressing the web pages including their embedded resources; paragraph 0011 which discloses that the archive file 102 contains compressed plurality of resources).

Consider **claim 12**, Morlitz shows and discloses an apparatus for use in a communication network (Fig. 1, client computers 10, with communication links 14 to the Internet 16, which in turn is linked to proxy servers 28 by links 32, to web servers 22 by links 30, and to storage media 34 by links 36, thereby forming a communication network apparatus; paragraphs 0018-0020 disclose the same details), comprising:
a processor and a memory (each of the client computer 10, proxy server 28 and web server 22 inherently includes a processor and a memory to operate), the processor configured to:
receive a request for a resource having embedded data (Abstract that discloses a client computer 10 which makes a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page, and the web server 22 receives the request via proxy server 28);
obtain the resource and the embedded data (Abstract that further discloses that the web server collects all the resources associated with the requested web page and bundles them into a single archive file, which is sent to the requesting client as a response; Fig. 2 which shows that the requested parent web page 52 has embedded child web pages 54, 56 and 58, that have embedded resources 66, 68, 70 (for parent) and 72, 74, 76,

78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 disclose the same details; Fig. 3 that shows the contents of a bundled and compressed archive file 102, assembled by the web server 22 and sent to the requesting client as a response; paragraphs 0024-0028 and 0034 describe the same details).

However, Morlitz does not specifically disclose using a resource index file having information regarding the resource and the embedded data, wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data; and update the resource index file based on obtaining of the embedded data using the resource index file.

In the same field of endeavor, Pepper et al. show and disclose using a resource index file having information regarding the resource and the embedded data (Fig. 1 that shows Index 155 being built by XML indexer 150, the resource index file including information not only about the requested resource but also embedded data such as IBM logo 170, image 175 and style sheet 165; column 2, XML Example 1, lines 34-46; Fig. 2, column 6, Example 2, lines 31-67 and column 7, lines 1-7 describe the generation and use of the resource index file in specific details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a resource index file having information regarding the resource and the embedded data, as taught by Pepper et al., in the apparatus of Morlitz, so as to render the requested resource and all the embedded data within it to the web client for complete web page display.

However, Morlitz, as modified by Pepper et al., does not explicitly disclose an apparatus wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data; and update the resource index file based on obtaining of the embedded data using the resource index file.

In the same field of endeavor, Hall, III et al. show and disclose the claimed apparatus wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data (Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message [e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources; flowchart of Fig. 3, describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources); and
update the resource index file based on obtaining of the embedded data using the resource index file (Fig. 3, steps 325-330 which show updating of the resource index file with the digital signature of the requested embedded resource and the corresponding location identifier based on obtaining of the embedded data, when the threshold number

of stored duplicates has not yet been exceeded, and step 355 of replacing embedded digital resource with location identifier of previously stored resource when the threshold has been exceeded; column 8, line 52 through column 9, line 11 disclose the same details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include, in the resource index file, a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data; and update the resource index file based on obtaining of the embedded data using the resource index file, as taught by Hall, III et al., in the apparatus of Morlitz, as modified by Pepper et al., so as to facilitate storage and retrieval of the resources embedded within a requested web page.

Consider **claim 13** and **as it applies to claim 12 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the request is received from a client device (in Morlitz reference, Fig. 1 that shows and abstract that discloses a client computer 10 which makes a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page, and the web server 22 receives the request via proxy server 28), wherein the processor is further configured to:
bundle the resource and the embedded data into a response file, and send the response file toward the client device (in Morlitz reference, abstract that further

discloses that the web server collects all the resources associated with the requested web page and bundles them into a single archive file, which is sent to the requesting client as a response; Fig. 2 which shows that the requested parent web page 52 has embedded child web pages 54, 56 and 58, that have embedded resources 66, 68, 70 (for parent) and 72, 74, 76, 78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 disclose the same details; Fig. 3 that shows the contents of a bundled and compressed archive file 102, assembled by the web server 22 and sent to the requesting client as a response; as well as a client request 100 that shows the URL of the web page being requested; paragraphs 0024-0028 and 0034 describe the same details).

Consider **claim 14** and **as it applies to claim 12 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein ***the*** processor is further configured to:

send a plurality of uniform resource location requests for the embedded data using the links of the resource index file; and receive the embedded data (in Morlitz reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and

in Hall, III et al. reference, Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message [e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources).

Consider **claim 15** and **as it applies to claim 14 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed apparatus, wherein the processor is configured to send the uniform resource location requests for the embedded data using the links of the resource index file based on the order of pre-determined times to obtain the embedded data (in Morlitz reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and
in Hall, III et al. reference, flowchart of Fig. 3, which describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources).

Consider **claim 16**, Morlitz shows and discloses a method, comprising:
receiving a request for a resource having embedded data (Abstract that discloses a client computer 10 making a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page; Fig. 1 that shows a proxy server acting as a gateway to direct client's web page request to the web server; paragraph 0019 that discloses the proxy server; Fig. 2 that shows that the requested parent web page 52 has embedded child web pages 54, 56 and 58, which have embedded resources 66, 68, 70 (for parent) and 72, 74, 76, 78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 that disclose the same details);
obtaining the resource and embedded data (Fig. 3; paragraph 0028 that disclose the process of collecting the resource requested by the client computer 10 and all the embedded resources associated with the requested resource (web page) and packaging them into an archive file 102; paragraphs 0029-0030 further disclose that the details of the embedded resources are obtained from site maps (resource index files));
bundling the resource and the embedded data into a response file (Fig. 3 that shows the contents of a bundled and compressed archive file 102 sent as a response; paragraphs 0029-0031 describe the same details); and
sending the response file (Fig. 3, HTTP Server Response 104 being sent to the client computer 10; paragraph 0034, lines 1-4 that disclose the same details).

However, Morlitz does not specifically mention using a resource index file having information regarding the resource and the embedded data, wherein the resource index

file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data.

In the same field of endeavor, Pepper et al. show and disclose using a resource index file having information regarding the resource and the embedded data (Fig. 1 that shows Index 155 being built by XML indexer 150, the resource index file including information not only about the requested resource but also embedded data such as IBM logo 170, image 175 and style sheet 165; column 2, XML Example 1, lines 34-46; Fig. 2, column 6, Example 2, lines 31-67 and column 7, lines 1-7 describe the generation and use of the resource index file in specific details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a resource index file having information regarding the resource and the embedded data, as taught by Pepper et al., in the method of Morlitz, so as to render the requested resource and all the embedded data within it to the web client for complete web page display.

However, Morlitz, as modified by Pepper et al., does not explicitly disclose a method wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data.

In the same field of endeavor, Hall, III et al. disclose the claimed method wherein the resource index file includes a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times

to obtain the embedded data (Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message [e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources; flowchart of Fig. 3, which describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include, in the resource index file, a link listing comprising a plurality of links to the embedded data, wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data, as taught by Hall, III et al., in the method of Morlitz, as modified by Pepper et al., so as to facilitate storage and retrieval of the resources embedded within a requested web page.

Consider **claim 18** and **as it applies to claim 16 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed method, wherein obtaining the resource and embedded data using the resource index file comprises:
sending a plurality of uniform resource location requests for the embedded data using the links of the resource index file; and receiving the embedded data (in Morlitz

reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and
in Hall, III et al. reference, Fig. 1 that shows and column 6, line 61 through column 7, line 33 which disclose a resource index file 132c that stores digital signatures of embedded resources within a requested web page or e-mail message [e.g. attachments, photos, etc.], further disclosing that the stored digital signatures may be sorted or organized for faster comparison, and include a location identifier [e.g. a pointer, address, reference, or link] so as to avoid storing multiple instances of the same embedded resources).

Consider **claim 19** and **as it applies to claim 18 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., further discloses the claimed method, wherein sending the uniform resource location requests for the embedded data using the links of the resource index file is performed based on the order of pre-determined times to obtain the embedded data (in Morlitz reference, paragraph 0028, lines 9-23 which disclose that the web server 22 collects links for all the child web pages, grand-child pages, and embedded graphics, audio and other resources to the requested depth, and sends requests with URLs of the embedded resources, in turn receiving the embedded

resource content, which it then packages and sends the collected resources as a bundled response to the requesting client; and
in Hall, III et al. reference, flowchart of Fig. 3, which describes the methodology used to reduce storing multiple copies of the same embedded resources in different web pages or messages by using a threshold beyond which the duplicate embedded resources are viewed via link lists, not by the actual embedded resources).

Claims 3, 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morlitz (US Patent Application Publication # 2002/0065800 A1**), in view of **Pepper et al. (US Patent Publication # 7,206,777 B2)** and further in view of **Hall, III et al. (US Patent Publication # 7,870,089 B1)** and further in view of **Shanman et al. (US Patent Publication # 7,231,357 B1).**

Consider **claim 3** and **as it applies to claim 2 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., discloses the claimed apparatus, except wherein the request is received from a wireless access network.

In the same field of endeavor, Shanman et al. disclose that the request is received from a wireless access network (column 4, lines 45-52 that disclose using a wireless network to distribute discount coupons along with a customized shopping list).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a wireless access network for receiving client requests, as taught by Shanman et al., in the apparatus of Morlitz, as modified by

Pepper et al. and Hall, III et al., so that the customers can send their shopping requests from anywhere using their wireless devices.

Consider **claim 4** and **as it applies to claim 3 above,** Morlitz as modified by Pepper et al., Hall, III et al. and Shanman et al., further discloses the claimed apparatus, wherein the request is from a client device (In the Morlitz reference, Fig. 3, Client request 100 which shows that a client computer 10 making a request for a web page delivery by specifying a URL of a home web page; paragraph 0028, lines 4-9 disclose the same details).

Consider **claim 17** and **as it applies to claim 16 above,** Morlitz, as modified by Pepper et al. and Hall, III et al., discloses the claimed method, except wherein the request is received and the response file is sent over a wireless access network.

In the same field of endeavor, Shanman et al. disclose that the request is received from and the response is sent over a wireless access network (column 4, lines 45-52 that disclose using a wireless network to process a request for discount shopping list from users and to distribute discount coupons along with a customized shopping list to them).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a wireless access network for receiving client requests and sending responses to them, as taught by Shanman et al., in the method of Morlitz, as modified by Pepper et al. and Hall, III et al., so that the customers can send

their shopping requests and receive discount coupons from anywhere using their wireless devices.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morlitz (US Patent Application Publication # 2002/0065800 A1**) in view of **Hall, III et al. (US Patent Publication # 7,870,089 B1).**

Consider **claim 28**, Morlitz shows and discloses an apparatus, comprising:
a processor and a memory (Fig. 1, client computers 10, with communication links 14 to the Internet 16, which in turn is linked to proxy servers 28 by links 32, and to web servers 22 by links 30; paragraphs 0018-0020 disclose the same details, each of the client computer 10, proxy server 28 and web server 22 inherently includes a processor and a memory to operate); the processor configured to:
transmit, from a client device toward a network device, a request for a resource having embedded data (Abstract that discloses a client computer 10 which makes a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page, and the web server 22 receives the request via proxy server 28); and
receive, at the client device, a response file comprising the resource and the embedded data (Abstract which further discloses that the web server collects all the resources associated with the requested web page and bundles them into a single archive file, which is sent to the requesting client as a response; Fig. 2 which shows that the

requested parent web page 52 has embedded child web pages 54, 56 and 58, that have embedded resources 66, 68, 70 (for parent) and 72, 74, 76, 78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 disclose the same details; Fig. 3 that shows the contents of a bundled and compressed archive file 102, assembled by the web server 22 and sent to the requesting client as a response; as well as a client request 100 that shows the URL of the web page being requested; paragraphs 0024-0028 and 0034 describe the same details).

However, Morlitz does not specifically disclose receiving, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data.

In the same field of endeavor, Hall, III et al. show and disclose the claimed apparatus that receives, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data (Fig. 1, resource segmentor 132b; column 5, line 59 through column 6, line 22, which disclose that as messages [resources] with a famous photograph are repeatedly exchanged, subsequent recipients may be given a link to a previously received version of the famous photograph, thereby suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data; flowchart of Fig. 3 shows and column 8, line 63 through column 9, line 11 teach the same details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to receive, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data, as taught by Hall, III et al., in the apparatus of Morlitz, so as to reduce redundant storage of the embedded resources within a requested web page.

Consider **claim 29**, Morlitz shows and discloses a method, comprising:
using a processor (Fig. 1, client computers 10, with communication links 14 to the Internet 16, which in turn is linked to proxy servers 28 by links 32, and to web servers 22 by links 30; paragraphs 0018-0020 disclose the same details, each of the client computer 10, proxy server 28 and web server 22 inherently includes a processor to operate) for:
transmitting, from a client device toward a network device, a request for a resource having embedded data (Abstract that discloses a client computer 10 which makes a request for a web page that has embedded child web pages and graphics and audio resources linked with the requested parent page, and the web server 22 receives the request via proxy server 28); and
receiving, at the client device, a response file comprising the resource and the embedded data (Abstract which further discloses that the web server collects all the resources associated with the requested web page and bundles them into a single

archive file, which is sent to the requesting client as a response; Fig. 2 which shows that the requested parent web page 52 has embedded child web pages 54, 56 and 58, that have embedded resources 66, 68, 70 (for parent) and 72, 74, 76, 78, 80 and 82 (for child web pages) within them; paragraphs 0024-0025 disclose the same details; Fig. 3 that shows the contents of a bundled and compressed archive file 102, assembled by the web server 22 and sent to the requesting client as a response; as well as a client request 100 that shows the URL of the web page being requested; paragraphs 0024-0028 and 0034 describe the same details).

However, Morlitz does not specifically disclose receiving, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data.

In the same field of endeavor, Hall, III et al. show and disclose the claimed method of receiving, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data (Fig. 1, resource segmentor 132b; column 5, line 59 through column 6, line 22, which disclose that as messages [resources] with a famous photograph are repeatedly exchanged, subsequent recipients may be given a link to a previously received version of the famous photograph, thereby suppressing, at the client device, initiation of requests for the embedded data

associated with the identifiers of the embedded data; flowchart of Fig. 3 shows and column 8, line 63 through column 9, line 11 teach the same details).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to receive, at the client device, a response including the resource and including a plurality of identifiers associated with the embedded data of the resource; and suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data, as taught by Hall, III et al., in the method of Morlitz, so as to reduce redundant storage of the embedded resources within a requested web page.

Response to Arguments

Applicants' arguments dated 09/21/2011 with respect to **claims 1-4, 6, 9-19, 28 and 29** have been considered but are not persuasive. After carefully reviewing the presented arguments and the prior art used in rejecting the claims dated 08/19/2011, the examiner has concluded that the cited references do adequately teach every claim element of the presented claims. The examiner's response to the presented arguments is listed below:

Consider independent claim 1. On page 9 of the "Remarks" section, the applicants argue that the cited Hall, III et al. reference does not teach or suggest that the digital signatures are "arranged in an order of pre-determined times to obtain the embedded data", as recited in applicants' claim 1. The examiner respectfully disagrees with this argument. Column 6, lines 61-65 of Hall, III et al. teach that "The digital

signatures of stored digital resources accessible to the receiving system 130 may be stores as an array of values, an index, a dynamic list or other information stored locally at data store 132c, remotely in a single device, or distributed across several devices. The digital signatures may be sorted or organized for faster comparisons". Furthermore, column 7, lines 13-18 in Hall, III et al. disclose that "if the intermediate system 132 determines that there are numerous instances of a resource through a comparison of the digital signatures or otherwise, a location identifier (e.g., a pointer, address, reference, or link) may be stored for one or more of the instances of the resource rather than maintaining each copy of the resource", thereby disclosing a resource index file with links to the embedded data. In addition, column 7, lines 22-27 disclose that "More generally, subsequently-received digital resources having the same resource may be stored with a location identifier that points to an instance of the resource previously received and/or stored", thereby suggesting that resources are stored and sorted in the order they are received, such that subsequently-received digital resources having the same resource may be stored with a location identifier that points to an instance of the resource previously received and/or stored. This teaching corresponds to the claim 1 recitation of "wherein the link listing is arranged in an order of pre-determined times to obtain the embedded data".

Next, consider claims 28 and 29. On page 11 of the "Remarks" section, the applicants further argue that Hall, III et al. teaches that "a user which is provided with a link to a previously stored version of the resource, is given an address at which the resource may be accessed, such that the user may initiate a request to retrieve the

resource from the address from which the resource may be accessed. The applicants' equating "providing a link" [that a user may click on to view or download a frequently specified resource stored by the email receiving server, not the email transmitting server] with a "request to retrieve the resource" is erroneous, because in a client/server environment, a request is sent from a client's email transmitting server, wherein in the Hall, III et al. scenario, the email has already been received by the email receiving server, that, in order to reduce the load of storing multiple instances of the same popular resource at the receiving server, instead provides a link where the resource is located, thereby suppressing, at the client device, initiation of requests for the embedded data associated with the identifiers of the embedded data, as recited in claim 28.

In conclusion, Hall, III et al. does not teach away from the elements of claims 28-29. It is merely a misrepresentation, on the part of applicants, of the teachings of Hall, III et al. **Claims 28-29** are therefore obvious over the cited prior art, and not allowable in their present form.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Art Unit: 2443

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kishin G. Belani whose telephone number is (571) 270-1768. The Examiner can normally be reached on Monday-Friday from 6:00 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-0800.

/K. G. B./
Examiner, Art Unit 2443

November 22, 2011

/PHUOC NGUYEN/
Primary Examiner, Art Unit 2443